

What is claimed is:

1. A time studies chronometer with a changeable display wherein:
 - (a) for each task of a plurality of observed tasks, the display presents a plurality of generic task description options to describe the task, and
 - 5 (b) the chronometer accepts input from a user to select one of said task description options for the task.
2. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 1.
3. The data carrier of claim 2 wherein the data carrier is a memory device.
- 10 4. The data carrier of claim 2 wherein the data carrier is an electronic signal.
5. The chronometer of claim 1 wherein each option is presented on the display with an icon.
6. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 5.
- 15 7. The chronometer of claim 1 wherein one of the options represents an unknown task and selection of this option by the user allows the user to enter a textual description of the task.
8. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 7.
9. The chronometer of claim 1 wherein the option descriptions are loaded into a memory of
20 the chronometer by copying from an external memory coupled to the chronometer.
10. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 9.
11. The chronometer of claim 1 wherein the options are presented on a touch screen and the input from a user is accepted from the touch screen.
- 25 12. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 11.

13. The chronometer of claim 1 wherein data sets collected for each of a plurality of tasks which all have the same generic task description are associated together by the shared task description for subsequent processing together.
14. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 13.
15. The chronometer of claim 1 wherein, for time data, the subsequent processing includes one or more of computing the range, distribution, standard deviation, mean, or median.
16. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 15.
17. A data carrier containing a plurality of generic task description options to describe a task to be observed in a time study, for copying into a time studies chronometer with a changeable display for presenting the options on the display.
18. The data carrier of claim 17 wherein the data carrier is a memory device.
19. The data carrier of claim 17 wherein the data carrier is an electronic signal.
20. The data carrier of claim 17 wherein each option is presented on the display with an icon.
21. A time studies chronometer with a changeable display wherein:
- (a) for each of a plurality of tasks to be observed, the display presents a plurality of generic task characterization options to characterize a task, and
- (b) the chronometer accepts input from a user to select one of said task characterization options.
22. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 21.
23. The chronometer of claim 21 wherein the options are presented on the display with one or more icons.
24. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 23.

25. The chronometer of claim 21 wherein the presented options include a characterization of value added or no value added.
26. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 25.
- 5 27. The chronometer of claim 21 wherein the presented options include a characterization of a method of inspection wherein the options comprise sight, touch, and device.
28. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 27.
29. The chronometer of claim 21 wherein the optional characterizations are loaded into a
10 memory of the chronometer by copying from an external memory coupled to the chronometer.
30. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 29.
31. The chronometer of claim 21 wherein data sets collected for each of a plurality of tasks which all received the same characterization are associated together by the characterization for
15 subsequent processing together.
32. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 31.
33. A time studies chronometer with a changeable display wherein:
- (a) for each series of tasks of a plurality of series of tasks, the display presents a
20 plurality of generic task series description options to describe the task series, and
- (b) the chronometer accepts input from a user to select one of said task series description options for the task series.
34. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 33.
- 25 35. The chronometer of claim 33 wherein each option is presented on the display with an icon.

36. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 35.
37. The chronometer of claim 33 wherein one of the options represents an unknown task series and selection of this option by the user allows the user to enter a textual description of the task series.
38. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 37.
39. The chronometer of claim 33 wherein the optional descriptions are loaded into a memory of the chronometer by copying from an external memory coupled to the chronometer.
40. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 39.
41. The chronometer of claim 33 wherein the options are presented on a touch screen and the input from a user is accepted from the touch screen.
42. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 41.
43. The chronometer of claim 33 wherein data sets collected for each of a plurality of task series which all have the same generic task series description are associated together by the shared task series description for subsequent processing together.
44. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 43.
45. The chronometer of claim 33 wherein, for time data, the subsequent processing includes one or more of computing the range, distribution, standard deviation, mean, or median.
46. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 45.
47. A time studies chronometer with a changeable display wherein:
- (a) before commencing a time study, the display presents a plurality of generic study description options to describe the study to be done, and

(b) the chronometer accepts input from a user to select one of said study description options.

48. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 47.

5 49. The chronometer of claim 47 wherein each option is presented on the display with an icon.

50. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 49.

10 51. The chronometer of claim 47 wherein the presented options include an option to continue a prior study.

52. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 51.

53. The chronometer of claim 47 wherein the optional descriptions are loaded into a memory of the chronometer by copying from an external memory coupled to the chronometer.

15 54. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 53.

55. The chronometer of claim 47 wherein data sets collected for each of a plurality of time studies which all have the same generic time study description are associated together by the shared time study description for subsequent processing together.

20 56. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 55.

57. The chronometer of claim 47 wherein, for time data, the subsequent processing includes one or more of computing the range, distribution, standard deviation, mean, or median.

25 58. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 57.

59. A time studies chronometer with a changeable display wherein:

(a) for a task series to be observed as part of a time study, the display presents a plurality of task series description options to describe the task series,

(b) upon receipt of input from a user selecting a task series, the display presents a plurality of task description options to describe a task, and

5 (c) the chronometer accepts input from a user to select one of said task description options for the task.

60. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 59.

10 61. The chronometer of claim 59 wherein the task series description options and the task descriptions are presented on the display with an icon for each description.

62. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 61.

63. The chronometer of claim 59 wherein,

15 (a) before presenting a plurality of task series description options to describe the task series commencing a time study, the display presents a plurality of study description options to describe the study to be done, and

(b) the chronometer accepts input from a user to select one of said study description options.

20 64. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 63.

65. The chronometer of claim 59 wherein the options are presented on a touch screen and the input from a user is accepted from the touch screen.

66. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 65.

25 67. A time studies chronometer with one or more inputs for receiving task designations, task series designations, and mark time events wherein:

(a) input task designations are grouped into a plurality of input task series designations,

(b) mark time events are received designating commencement and finish of tasks,

5 (c) a mark time event is received designating finish of each of two or more series of tasks, and

(d) for each of the two or more series of tasks, the chronometer measures a time duration.

68. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 67.

10 69. The chronometer of claim 67 wherein the input task designations and task series designations are received from user selection among options represented as icons.

70. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 69.

15 71. The chronometer of claim 67 wherein the input task designations and task series designations are received on a touch screen.

72. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 71.

73. The chronometer of claim 67 wherein the input task designations and task series designations are selected from options that present alternative generic descriptions.

20 74. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to be the chronometer of claim 73.

75. A method in a time studies chronometer for capturing inspection method data for one or more tasks, comprising the steps of:

(a) receiving a mark time event designating commencement of a task,

25 (b) receiving inspection method data input on the chronometer;

(c) receiving a mark time event designating finish of the task, and

(d) storing in a memory said inspection method data and, associated with said inspection method data, time data indicating duration of the task.

76. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 75.

5 77. The method of claim 75 wherein the input inspection method is received from user selection from pre-specified options for inspection methods.

78. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 77.

79. The method of claim 77 wherein the pre-specified options for inspection methods are
10 presented to a user as icons displayed on a display of the chronometer.

80. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 79.

81. The chronometer of claim 77 wherein the pre-specified options for inspection methods comprise sight, touch, and device.

15 82. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 81.

83. A method in a time studies chronometer system for generating a work sheet for a task, comprising the steps of:

(a) receiving standard text for presentation on a worksheet;

20 (b) receiving a task name and description for a task;

(c) receiving a mark time event designating commencement of the task;

(d) receiving a mark time event designating finish of the task;

(e) storing in a memory said task name and description and, associated with said task name and description, time data indicating duration of the task; and

25 (f) generating data representing a worksheet document for the task comprising the standard text, the task name and description, and duration of the task.

84. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 83.

85. The method of claim 83 further comprising receiving an indication of an inspection method for the task, associating said inspection method indication with the task, and including
5 an indication of the inspection method in said worksheet document.

86. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 85.

87. The method of claim 83 further comprising receiving digital photographic data, associating said photographic data with the task, and including said photographic data in said
10 worksheet document.

88. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 87.

89. A method in a software based time studies chronometer with a display and a multi-tasking operating system for simultaneously capturing data for two or more time studies,
15 comprising the steps of:

(a) receiving user input instructing the time studies chronometer to commence a first time study and, in response, running a first instance of a time study software module which presents information in a first window on the display;

(b) while the first instance remains operational, receiving user input instructing the
20 time studies chronometer to commence a second time study and, in response, running a second instance of a time study software module which presents information in a second window on the display;

(c) upon receipt of user input designating one of the windows, causing the display to present the information of the designated window; and

(d) while the first window is displayed, entering mark time events received by the
25 chronometer in a data record for the first time study and, while the second window is displayed, entering mark time events received by the chronometer in a data record for the second time study.

90. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 89.

91. The method of claim 89 wherein the display is also a touch screen and the user input is received at the touch screen.

5 92. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 91.

93. The method of claim 89 wherein the chronometer is a palm-top general purpose computer.

10 94. A data carrier containing a computer program which, when run on a general purpose computer, causes the computer to perform the method of claim 93.